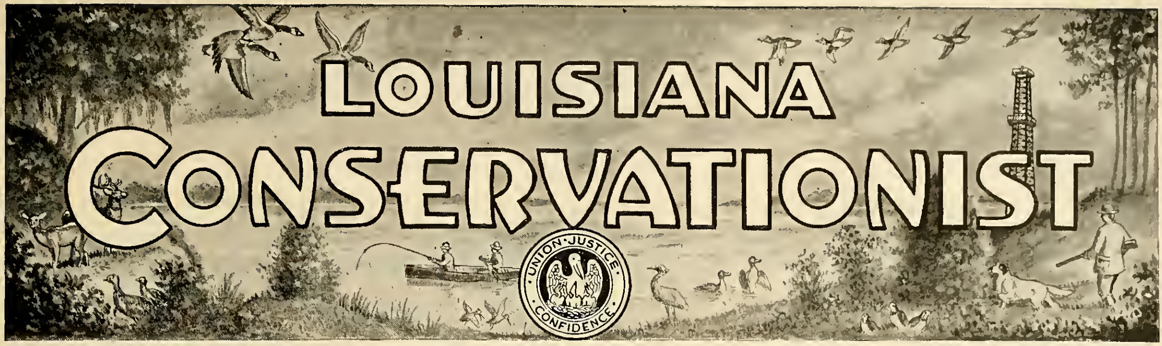


LOUISIANA CONSERVATIONIST

Volume 3 AUGUST, 1945 Number 9

Federal Regulations for Ducks and Geese Announced

Eighty Day Duck Season Set, Bag Limits Lowered

The United States Fish and Wildlife Service last week made public the regulations governing the 1945-46 hunting season for ducks, geese and other migratory waterfowl. The regulations were contained in a proclamation by Secretary of Interior Harold L. Ickes, which was approved by President Truman.

In most respects, as far as Louisiana is concerned, the regulations are about the same as last year. An 80 day hunting season for ducks and geese has been set, the same as last year, and the dates are the same as they were last year, from November 2nd to January 20th, inclusive.

The daily bag limit for ducks was set at 10, eliminating last year's provision for an additional daily bag of five mallards, pintails or widgeons.

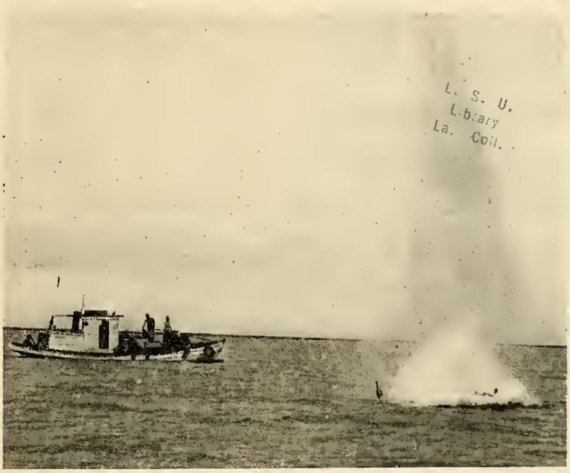
The post season period of possession of migratory game birds was extended from 45 to 90 days. Taking of waterfowl by means of bait or live duck or goose decoys continues to be prohibited as in the past.

Shooting hours remain the same as last year, one-half hour before sunrise to sunset.

There will be a split season on doves again this year, just as it was last year, but there is some change in the dates. The dove season opens earlier and closes later. This year's dove season is from October 1 to October 15th, and from December 18th to January 31. Last year the dates were October 15 to October 30, and December 10 to January 20.

The season for Rails and Gallinules and for Woodcock remains the same as last year, as do the

(Continued to Page 2, Column 3)



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Louisiana's dynamite-oyster experiments just concluded by technicians of the Department of Wild Life and Fisheries have provided far-reaching results and attracted nation-wide attention, because it is the first time such experiments have been successfully conducted. The above photo shows a 400 pound charge of dynamite being exploded 25 feet below a natural oyster reef.

(Turn to page 5 for a detailed report on these experiments)

Shrimp Trawling Resumed in State After 51 Days Closed Season

Louisiana's shrimp season on inside waters reopened on August 16th after being closed for 51 days in conformity with a Legislative enactment providing for two closed seasons a year. The closed seasons are between March 16th to May 15th and June 26th to August 15th.

A colorful Blessing of the Shrimp Fleet ceremony is scheduled to be held in Morgan City on Sunday, August 26th. Other communities have already held their ceremonies and their shrimp fleets started their work on the morning the season reopened.

Request for an earlier opening of the season this year were refused by the Department on the grounds that the Legislature is the only legal authority with the right to change or modify the opening and closing dates. Some of the petitions received by the Department asserted that shrimp were sufficiently large in the latter part of July to permit an earlier opening of the season in inside waters. To check this information for future reference, Commissioner John G. Appel authorized technicians of the Wild Life and Fisheries Department to survey inside fishing waters to determine size of the shrimp. This survey was undertaken during the last four

(Continued to Page 2, Column 3)

Lake Bistineau Water Lowered to Improve Fishing

Acting upon recommendations of its technicians and after approval had been voted at an open meeting of sportsmen, commercial fishermen and camp operators, the Department of Wild Life and Fisheries last week begin the work of lowering of the waters of Lake Bistineau four feet in order to provide better hunting and fishing on this lake.

The Lake Bistineau Commission also approved the plan to lower Lake Bistineau after studying reports from technicians who surveyed the lake. This Commission consists of Jasper K. Goodwill, Minden, chairman, J. H. Mercer, Taylortown, secretary and Philip Cook of Ringgold.

Technicians of the Department of Wild Life and Fisheries recently recommended that waters of Lake Bistineau, Black, Clear and Saline Lakes be lowered during the summer months to retain and assure good fishing in these lakes.

The gates of Black Lake dam will probably not be lowered this year due to a break in the earthern dam in Chivey bayou. This break is expected to lower the lake about four feet.

The recommendation that waters in these lakes be drawn down during the hot weather period was made by Department technicians after months of extensive studies. According to Dr. James N. Gowanloch, chief biologist, it has been definitely proven that impounded water eventually destroy the productivity of the lands flooded and then in order to keep the desired populations of game fish in these impounded waters, it is necessary to draw down these waters and

(Continued to Page 8, Column 4)

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Commissioner

LOUISIANA CONSERVATIONIST

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ISAAC D. CHAPMAN
Editor

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Volume 3 AUGUST, 1945 Number 9

TYPES OF VIOLATIONS WHICH OCCURRED DURING JULY

Angling Without License	27
Possessing Undersized Game Fish	5
Possessing Undersized Commercial Fish	1
Using Illegal Tackle on Game Fish	2
Commercial Fishing—No License	7
Possessing Undersized Shrimp	4
Possessing Shrimp — Closed Season	2
Trawling for Shrimp—Closed Season	25
Hunting Migratory Waterfowl —Closed Season	1
Hunting Deer Out of Season	6
Hunting Quail Out of Season	1
Hunting Squirrels Out of Season	3
Hunting Rabbits Out of Season	1
Hunting Snipe—Closed Season	4
Fishing Louisiana Waters—No License	3
TOTAL	92

LAW ENFORCEMENT IMPROVING; 83 CASES—83 CONVICTIONS

The Enforcement Division of the Department of Wild Life and Fisheries have made 83 arrests for illegal trawling and shrimp trawling in closed season and all of these 83 cases have resulted in convictions. There are two closed seasons on shrimp in Louisiana, the first, between March 16 and May 15, and the second between June 26 and August 15.

The report of the 83 arrests and convictions in shrimp trawling covers activities up to August 10th, and since that time a number of other arrests have been reported for those attempting to "rush the season" before the legal opening on August 16th.

PARISHES IN WHICH VIOLATIONS OCCURRED DURING JULY

Bossier	1
Cameron	2
Catahoula	1
Franklin	1
Jefferson	20
Jefferson Davis	4
Lafourche	4
Natchitoches	2
Orleans	24
Ouachita	1
Plaquemines	4
Rapides	1
Sabine	1
St. Bernard	7
St. Charles	6
St. Martin	1
St. Tammany	6
Terrebonne	3
Webster	2
West Carroll	1
TOTAL	92

State's Shrimp Season Reopens

(Continued from Page 1)

days of July, and shrimp were trawled in various inside waters of the State. At the conclusion of the survey, the Commissioner was informed that for the most part the shrimp were too small and under legal size and it would be unwise and harmful to future shrimping operations to permit trawling before the legal date for the opening of the season.

1945 Duck, Geese Regulations Are Announced

(Continued from Page 1)

bag and possession limits. For Rails and Gallinules the season is from September 15 to December 15 and for Woodcock the season is from December 15 to December 29th.

The season on coots (Poule-d'Eau) remains the same as last year, from November 2nd to January 20th. The bag and possession limits remain at 25, the same as last year.

Hunting licenses for the 1945-46 season will be placed on sale at all sheriff's offices in the State early in September. Printed digests of this year's hunting regulations will also be available soon at all sheriffs' offices.

New bag limits for ducks and geese this year are as follows:

For Ducks: Daily bag limits on ducks (except American and red-breasted mergansers) are 10 in the aggregate of all kinds, including in such limit not more than 1 wood duck. Any person at any time may possess not more than 20 ducks in the aggregate of all kinds (not including American and red-breasted mergansers), but not more than 1 wood duck. American and red-breasted mergansers, 25 singly or in the aggregate, with no possession limit.

For Geese: Daily bag limits on geese are 4 blue and snow geese (singly or in the aggregate) plus 2 of some other kind, including brant. Possession limit is 8 blues and snows plus 4 of other kinds, including brant.

DIRECTORY OF DIVISION HEADS AND OFFICIALS OF WILD LIFE AND FISHERIES DEPARTMENT

John G. Appel, Commissioner

L. J. Scanlon,
Executive Assistant

H. M. Grode, Chief Accountant

J. N. Gowanloch,
Chief Biologist

Isaac D. Chapman,
Education and Publicity

J. C. LeBlanc, Enforcement

Armand P. Daspit,
Fur and Wildlife Refuge

James Brown,
Fish and Game

J. N. McConnell,
Oyster and Waterbottoms

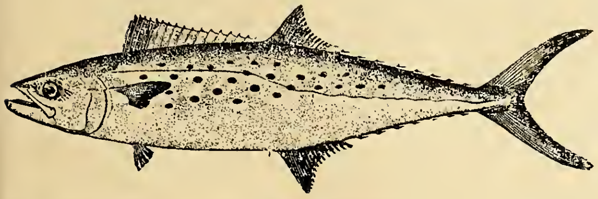
Louis Cusachs,
Research and Statistics

AGENTS PARTICIPATING IN JULY ARRESTS

John G. Alford, Angelo Benandi, Jos. L. Billiot, John Busalacchi, Louis R. Cabirac, Harris W. Champagne, Edgar J. B. Clement, Richard Clement, Ruben Davis, Tom C. Duck, C. W. Elam, Edwin D. Fairbanks, D. L. Farrar, John E. Foolkes, Allen L. Hawsey, Lesma Hebert, Clarence Hood, Maurice Huval, Wm. M. Jones, B. P. LeBlanc, J. V. McConnell, Ben Mayeaux, T. E. Minnot, Sam Nunez, Wilfred Nunez, Benjamin E. Parker, Armand J. Petit, Lawrence Sintes, Allen D. Swayze, Frank Trocchiano, Paul Voitier, Hector Waguespack, L. C. Weaver.

KNOW YOUR LOUISIANA FISH

By JAMES NELSON GOWANLOCH,
Chief Biologist, Fish and Game Division,
Louisiana Department of Wild Life & Fisheries



No. 6 SPANISH MACKEREL

Scomberomorus maculatus (Mitchill)

Other Names: Spaniard; Spotted cybium; Bay mackerel; Spotted mackerel.

Range: Brazil to Cape Ann, occasionally to Maine. Very abundant in Gulf of Mexico and north to North Carolina.

Size: Length, 2½ feet; weight, 10 pounds.

Identification: Smaller than the other two species. Has a soft dorsal inserted in advance of the anal. The fins are not closely scaled, the lateral line is not very abruptly decurved. The body is relatively deep.

Fin Formula: Dorsal 17 spines, 18 soft rays and 9 spines. The 9 spines form finlets. Anal fin 11 spines, 17 soft rays and 9 spines.

Description: One of our most beautiful fish. Silvery, bluish above; sides with many elliptical spots of dull orange color; two rows of these spots below the lateral line and one row above; spinous dorsal fin is white at the base and black above; soft dorsal fin is tinged with yellowish and has black margins; anal fin is white; posterior sides of pectoral fin is black; anterior side, yellowish with black; caudal is black.

Food: Feeds mostly on fish.

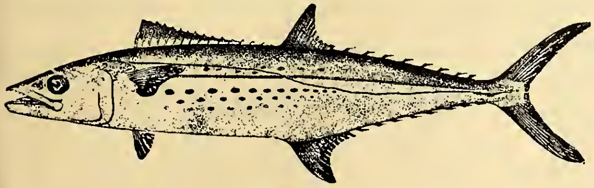
Bait: All three species of mackerel are caught with the same methods, namely, trolling, using spoon, small "feather duster", and particularly successfully a number of different types of bait made by cutting streamers from light cotton and tying them so that they flow backward and cover the hook. Various local enthusiasts have devised their own private cloth combinations, some being entirely white, some mixed as red and white, and some all red. Mackerel do not usually take cut bait.

General: The mackerels are remarkable for their strength, their speed and their beauty, while, in addition to all these qualities that make them of interest to the sportsmen, they are extremely fine food fish. All of the mackerels are predacious and are well equipped to catch their prey with their numerous sharp teeth. Their streamlining, plus the narrow tail base and powerfully developed tail fin, gives them speed and maneuverability.

Related to the mackerel family is the very peculiar, and in Louisiana waters very common, cutlass fish which reaches a length of as much as 5 feet, though generally smaller. This fish, which is of no commercial value, is frequently taken in shrimp trawls and is immediately identifiable by the fact that it has a continuous dorsal fin running from the head to the tip of the tail and also by the fact that the tail is completely degenerated, tapering to a very slender point and completely lacking any tail fin. The cutlass fish has sometimes been used very successfully as tarpon bait.

Included in the mackerel family are the very valuable Tunas, which usually weigh 100 to 250 pounds that have been authentically reported in the case of the bluefin tuna at 14 feet, with a weight of 1600 pounds.

The eastern mackerel has been known to congregate in schools as vast as twenty miles long and one-half mile wide; the remarkable thing about these fish being that they were all within an inch of the same size and, therefore, must have represented a group that had been spawned at the same time.



No. 7 KING MACKEREL

Scomberomorus cavalla (Cuvier and Valenciennes)

(This fish was formerly known by the technical name of **Sierra**)

Other Names: Sierra; Kingfish (this name however is usually used for a relative of the Redfish); Cavalla.

Range: Warm parts of North Atlantic, south to Brazil; sometimes abundant particularly along the Florida Keys.

Size: Length, 5 feet; weight, 100 pounds.

Identification: The body is relatively slender, the lateral line is abruptly decurved.

Fin Formula: Dorsal 15 spines—1 spine, 15 soft rays—8 spines; anal 2 spines, 15 soft rays—8 spines.

Description: Adult iron gray, nearly or quite without spots; young with sides of body marked with darker yellowish spots; spinous dorsal without black blotch anteriorly.

Food: Chiefly fish and squid.

General: Mackerel belong to the family Scombridae, oceanic fish, large fast swimmers. Immediately recognizable by a series of small finlets. No bony scutes on the posterior part of the lateral line, differing therein from the various species of jackfish (family Carangidae), some of which are well known Louisiana sport fish. Other species of the mackerel family are Ocean Bonito, Long-finned Albacore.

A third species of mackerel, the Painted mackerel, **Scomberomorus regalis** (Block), occurs commonly in the Gulf of Mexico and is a source of profound confusion to sportsmen since it resembles in appearance the Spanish mackerel, but is much larger in size. Furthermore, it is an exceedingly slender fish, so much so that a Painted mackerel six feet long may weigh as little as twenty pounds.

The fin formula for the Painted mackerel is dorsal 17 spines—1 spine, 15 soft rays—8 spines; anal 2 spines, 14 soft rays—8 spines.

The Painted mackerel can best be distinguished from the King mackerel, which it closely resembles, by the fact that the lateral line is not very abruptly decurved as is the case in the King mackerel. The body of the Painted mackerel is relatively deep. The Painted mackerel is silvery in color with two blackish, longitudinal bands crossing a lateral line below soft dorsal fin, both lines broken posteriorly with longitudinal spots; above and below these are numerous brownish spots in rows persistent in the adult. Posterior portion of dorsal spinous fin black.

The Painted mackerel ranges from Brazil to Cape Cod, and is usually rather a rare fish although it may at times become temporarily locally abundant.

News for Anglers–Answers Given to Angling Definitions and Expressions

(**Editor's Note:** The first report of the committee on tackle terminology of the National Association of Angling and Casting Clubs contains many interesting definitions and facts. The committe was appointed by the Association to collect words and expressions concerning casting, angling, and fishing tackle with proper definitions and explanations of their meaning, and to compile them as a book or lexicon. A selection of some of the definitions is given in the following article.)

ANGLING, fishing practiced not as a mean of obtaining a livelihood, but as a source of recreation and pleasure.

ARTIFICIAL FLY, an imitation of a real or imagined fly or insect. Roughly divided into five groups: Wet, Dry or Floating, Nymph, Streamer and Bug. The first description of an artificial fly is by Aelian, 170-230 A.D., who wrote that the Macedonians when fishing in the river Astraeus for a fish with speckled skins used an artificial fly tied as follows: "They fasten redish wool round a hook and fit on the wool two feathers which grow under a cock's wattles, and which in color are like wax." There is no reason to believe, however, that this practice had not been going on for some years previous. In fact, over two centuries earlier, Martial wrote, "Who has not seen the scarus rise, decoyed, and killed by fraudful flies." So far as is known, these two lines are the first mention of a fishing fly.

BACK or BACKWARD CAST, the casting motion or cast made to cast the fly or plug to the back of the caster.

BACK LASH, an unexpected termination of the forward cast in bait casting, caused by the spool traveling faster than the pull of the line, which in turn causes the spool to overrun, thereby causing a snarl or "bird's nest" on the spool of the reel. The two chief causes of a backlash are the improper thumbing of the reel when casting and the careless laying of the line on the spool when retrieving the cast.

BAIT, generally understood to mean natural lures used to catch fish. However, when preceded by the word "artificial" can mean any lure other than a fly.

BAIT CASTING, a method of angling whereby the lure is cast from the reel, the momentum of the lure in the air pulling line off the spool.

BAIT CASTING ROD, generally not over six feet long, having the reel seat above the hand grasp and a series of solid ring guides leading from the reel to the tip top. Usually in one or two sections.

BAIT ROD, generally seven to nine feet long having a grasp both above and below the reel seat and a series of solid ring guides leading the line from the reel to the tip top. Usually in two or three sections.

BASS BUG, an artificial floating bug usually tied on a hook size six or larger. Anything smaller than this would be a trout or pan fish bug.

BULGING, a type of underwater rise causing a bulge on the water‘s surface, made by the sudden turn and consequent swirl of the fish's tail when chasing subaqueous insects in shallow water, generally over or near weedbeds. Sometimes the bulge is accompanied by a torpedo-like wave.

CASTING LINE, the line that is cast and to which the leader, in fly fishing, or the trace, in bait casting is attached. Years ago, but no longer so used, the words "casting line" described what is now the leader.

DAPING or DEBBING, the term applied to angling with the fly, natural or artificial, just off the tip of the rod so that nothing but the fly touches the water. Generally but three or four feet of leader extend from the rod tip, and of necessity a fairly stout outfit is required.

DIMPLING, a type of surface rise whereby the fish sucks in his prey with the least possible disturbance, showing only a dimple; usually indicative of a large fish. The very opposite of this is the explosive type of rise caused by a fish catching or attempting to catch an insect that is just about to leave the water. Between these two extremes, there are numerous variations of surface rises, having no popular names by which they are generally known.

DROPPER, a fly suspended by a piece of gut from the main leader, between the terminal fly and the line.

DRY FLY, an artificial fly so constructed that it floats easily. Usually the hackles and tail fibers are its main support. The earliest references to the floating fly appeared in The Improved British Angler by Robert Huish, 1938. See EYED FLY.

EYED FLY, an artificial fly tied on a hook having an eye for attaching directly to the leader. Mr. Henry S. Hall of England is generally credited with having evolved the eyed hook in 1877 together with the method of tying split-winged dry flies. Actually, Mr. Aldam's "Quaint Treatise," published a year earlier, contained plates of Mayflies tied on eyed hooks. It remained, however, for Mr. Hall together with Mr. George Bankhart to design a better hook and publicize this new method of construction.

FALSE CAST, a cast in the air in which neither the fly or line touch the water. This cast is used both to dry the fly and vary the length of line in dry fishing.

FERRULE, the metal plug and cap which when fitted together, male and female, on the joining ends of the sections of a rod, assemble the rod.

FLY ROD, generally from seven to nine and one-half feet long, having a reel seat below the hand grasp and a series of snake guides starting with a solid ring "stripper" guide 18 inches or so above the hand grasp and terminating at the tip top. Usually in two or three sections.

FLY TYING, the art of fixing various materials on a hook to represent real or imagined flies or other objects which deceive or attract fish.

FOUL HOOKED, a fish hooked outside the mouth.

GAME FISH, fish, which by reason of courage, strength, beauty and solidity of their flesh are sought by those who angle for sport with delicate fishing tackle.

GUIDE, a ring, a series of which direct the line from the reel to the top of the rod. A guide on a bait casting rod or a bait rod is a solid ring; on a fly rod is usually a split ring, called because of its shape a snake guide. Some imported fly rods have small ring guides called bridge guides, of which there are two types, one being a miniature ring guide, the other a type of ring guide set on the rod at about a 45-degree angle, resembling a snake guide in outward appearance.

HOOK, a piece of metal bent into a curve for catching fish. The ancient fishermen used hooks made of various materials such as bone, ivory, flint, shell, stone and even thorns of a proper shape. However, as early as 4000 B. C. the Egyptians were using quite refined hooks made of copper, which was a harder material than the copper of today. How long after this hooks suitable for tying artificial flies were made can only be conjectured. The most interesting modern deveopment of the hook was in the 1870's when the eyed hook was evolved.

HUMPING, is a variation of the bulge caused by the head and tail rise of a fish just below the surface when intercepting a rising nymph. To summarize, the BULGE is caused by a fish feeding on insects traveling horizontally, while a HUMP is caused by fish feeding on nymphs traveling vertically, or rising to the surface.

NATURAL GUT, sometimes called "cat" (caterpillar) gut. It is the stretched and dried fluid from the silk sack of a moth caterpillar or silkworm.

POLE, a rough article in its natural state used for angling; for instance, Calcutta Bamboo, Japanese Cane and Southern Reed. They are really gigantic grasses.

REEL, a spool set in a frame, which is attached to the rod-butt near the hand, for convenience in controlling the length of line, when angling. The first mention of a reel, called "wind" by T. Barker in his "The Art of Angling," occurs in 1651. The earliest picture is in his enlarged edition of the same book, 1657. Walton first refers to the reel as a "wheele" in his second edition of 1665, chapter VII, "which is to be observed better by seeing than by a large demonstration of words."

STREAMER FLY, an artificial fly having a longer wing than usual. Usually tied on a long shank hook to imitate a minnow.

STRIKE, a twitch given to the rod by wrist or forearm, to aid in setting the hook. Also, when a fish hits the lure with force.

THUMBING REEL, a bait casting term designating the controlling of the speed of the spool when casting, by means of the thumb's pressure on the spool.

TICK, when line, leader or fiy strikes the water in front of the caster while false casting.

TOURNAMENT PLUG, a hookless plug used in touraments or for practice casting.

TRACE, in bait casting, the connecting link between the lure and casting line. May be of line, gut, wire or other substance.

WIND CAST, an overhead cast into the wind, in which the downward acceleration of the forward cast is emphasized and terminated at a lower point than usual.

Dynamite-Oyster Experiments Provide Far-Reaching Results

By
James Nelson Gowanloch,
Chief Biologist, Fish and Game
Division,
And
John E. McDougall,
Department Geophysicist, Division
of Oysters and Water Bottoms,
Louisiana Department of Wild
Life and Fisheries

Commissioner John G. Appel instructed the writers to investigate fully the effects on oyster beds of the explosion of dynamite charges used in seismographic exploration for oil.

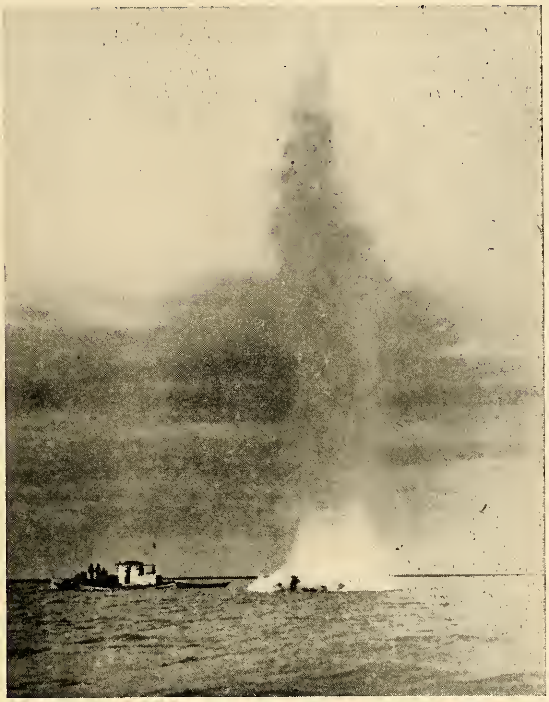
James N. McConnell, Director of Oysters and Water Bottoms, five years ago inaugurated a program of precise control of all seismographic operations in the State. Naturally, he was particularly interested in the relations of seismographic work to oysters, since, under the undisciplined seismographic operations as practiced before this program was established, heavy oyster damage was undoubtedly caused, the exact nature of the mechanism of which remained obscure.

The methods, progress, completion and results of these experiments are herein reported.

The importance of the conclusions is far-reaching since nowhere ever before had experiments of comparable magnitude been carried out. Further, these results now provide a clear and sound basis for a safe program of control of seismographic operations in relation to oyster reefs.

It must be emphasized that the Department of Wild Life and Fisheries has no intention whatever of permitting the use of such heavy charges in the midst of oyster beds but these excessively heavy charges were used experimentally to establish beyond doubt the fact that if they were harmless in their effects the lesser charges, which are permitted, would certainly fall well within the margin of safety.

The writers previously planned, conducted, completed and provided a report upon a comprehensive earlier series of investigations of submarine explosions concerning the effect of the shock waves on shrimp, fish (croakers) and oysters. That series, which was conducted in the Gulf of Mexico and which involved the use of single dynamite shots of up to 800 pounds, made use of specially designed 30-inch cube "live cars" which, suspended in the water at regulated distances from the point of explosion, contained the experimental animals. These shrimp, fish and oysters were held in position for 48 hours before the blast, were examined immediately before the explosion, immediately after the explosion and again at the elapsed post-explosion times of 24 and 48 hours.



One of the boats used in the oyster research and experiments, and to the right another charge of dynamite being exploded.

This experimental series established the astonishing but inescapable conclusion that charges of dynamite up to 800 pounds, merely placed on the ocean floor and there fired, failed to damage in any way shrimp at a distance of only 50 feet and failed to kill fish at a distance of only 200 feet.

However, the senior author, for biological reasons, was skeptical that the effects of the explosion-originated waves would be the same on single oysters suspended in cages as they would be upon oysters which were not separated individuals but were integrated as part of a compact oyster reef. The writers accordingly decided to plan and execute a complete series of investigations of the results of such explosion wave impact upon oyster beds.

The first difficult problem was to locate suitable experimental areas. The requirements were exacting. It was necessary that areas of sufficient extent be found wherein healthy, rapidly growing oysters were present in sufficient numbers and the grounds themselves were neither under private lease nor were being presently publicly fished.

Consideration and examination of many parts of the Louisiana coastline extending from as far east as the Mississippi border and as far west as the western end of Marsh Island were undertaken. The area finally chosen comprised three "lakes" near Lake Eugenie.

The Gulf Oil Corporation, through their Research and Exploration Division, gave invaluable cooperation to these oyster-dynamite studies by transferring a complete drilling, loading and firing crew, and dynamite boat "Eagle Pass" to the scene of operations. The writers are indebted to the following members of the Gulf Oil Corporation for their aid in these experiments, Messrs. W. J. Osterhoudt, W. B. Lee, and F. Bailey Summers. Particular mention should be made of the indispensable aid given by Mr. W. B. Wiley, party manager, who directed his efficient crew consisting of Messrs. A. F. Krause, J. B. Bowman, O. L. Patterson, L. J. Broussard and Noah Curole. They carried out expertly all the seismographic work requested by the writers. Efficient cooperation and aid were also extended by Messrs. R. McClure Schmidt, Albert D. Harvey and Felix Mire of the United States Engineers Office, New Orleans District.

Adverse weather conditions greatly hampered and delayed the work but without exception every projected experiment in the series was completed.

The oyster-dynamite series of experiments were conducted as follows:

A careful preliminary survey revealed that the oysters present, although not "fat", were healthy, growing rapidly, and present in sufficient abundance and extent to provide material so that the six different shots fired could be spaced without possible interference with each other or possible accumulative effect. Preliminary counts were made to determine the normal mortality among the oysters present. Immediately before the blasting, samples of the oysters were carefully tonged and sacked. These thus provided a "control". Immediately after the shot, similar adequate samples of the oysters were tonged at regular radial distances from the shot point, sacked, and transferred together with the "controls" to the U. S. Fisheries Station at Pensacola.

The director of the Station, Dr. A. E. Hopkins, one of the most eminent oyster authorities in the world, very kindly provided facilities so that these oysters could be held in four large tanks with an adequate constant change of pure sea water. These tanks had for years previously been used for oyster studies and the conditions created in them were thus proven to be quite satisfactory for oyster survival and growth.

These oysters held at Pensacola could thus be depended upon to show what effect, if any, the dynamite shock wave alone had upon them. They were examined over an initial period of some days and then kept under subsequent examination until six weeks had lapsed, when final counts were made to provide comparisons in death rate between all the groups studied.

It had been the belief of the fishermen that the release of gases

(Continued to Page 8, Column 3)

REPORT OF ANGLING, HUNTING AND TRAPPING LICENSES FOR 1943-44

	For Year 1943 Angling License			Season 1943-44 Hunting License			Season 1943-44 Trapping License
	Res.	Non-Res.	Non-Res.	Res.	Non-Res.	Non-Res.	Resident
Parish	@ $1.00	4-day @ $2.00	Annual @ $5.00	@ $1.00	4-day @ $5.00	Annual @ $15.00	@ $2.00
Acadia	205	5	none	1,366	5	none	15
Allen	176	6	2	1,270	2	none	61
Ascension	128	none	none	993	none	none	33
Assumption	21	none	none	590	none	none	157
Avoyelles	70	none	none	927	1	none	124
Beauregard	117	2	4	701	18	3	57
Bienville	275	10	4	725	none	none	150
Bossier	616	111	101	1,055	none	none	67
Caddo	3,946	422	644	5,248	40	10	68
Calcasieu	2,821	177	136	6,278	255	52	164
Caldwell	52	1	none	585	none	1	66
Cameron	92	166	742	740	272	20	540
Catahoula	52	none	none	803	2	none	67
Claiborne	426	27	100	877	4	1	25
Concordia	262	74	290	565	2	4	138
De Soto	290	74	52	994	8	none	99
East Baton Rouge	2,460	1	4	5,778	13	none	28
East Carroll	287	17	44	937	5	2	185
East Feliciana	50	none	1	711	1	1	20
Evangeline	147	15	1	909	1	none	46
Franklin	86	1	none	1,098	2	none	75
Grant	242	1	none	1,218	1	none	54
Iberia	123	none	none	1,171	4	1	160
Iberville	138	none	none	1,070	none	none	122
Jackson	237	4	3	1,087	5	none	83
Jefferson	205	none	none	2,446	none	none	210
Jefferson Davis	319	9	5	1,237	40	none	45
Lafayette	240	1	2	1,019	3	none	14
Lafourche	181	none	none	2,185	4	none	544
La Salle	174	2	none	958	4	none	20
Lincoln	193	5	5	694	5	none	24
Livingston	141	4	8	1,027	none	none	77
Madison	142	22	136	864	20	6	162
Morehouse	353	1	1	1,642	3	none	138
Natchitoches	1,115	1,761	438	2,052	30	3	161
Ouachita	1,702	5	2	3,417	4	none	82
Plaquemines	125	5	5	1,000	15	10	1,500
Pointe Coupee	204	1	none	720	1	none	68
Rapides	1,460	3	5	5,114	16	2	115
Red River	120	19	11	629	5	1	48
Richland	138	5	none	1,124	4	none	132
Sabine	85	none	none	643	none	none	74
St. Bernard	100	none	none	375	none	none	325
St. Charles	98	none	none	806	none	none	155
St. Helena	6	none	none	211	none	none	8
St. James	44	none	none	557	none	none	154
St. John the Baptist	9	none	none	342	none	none	40
St. Landry	235	none	none	1,782	15	2	119
St. Martin	25	none	none	451	none	none	74
St. Mary	109	none	1	1,405	25	none	351
St. Tammany	300	24	9	1,892	2	2	186
Tangipahoa	208	10	22	1,656	1	none	139
Tensas	219	180	198	1,232	24	3	170
Terrebonne	184	5	1	2,410	5	1	875
Union	90	6	6	849	3	2	61
Vermilion	106	1	1	1,076	26	none	417
Vernon	284	none	3	1,202	2	1	86
Washington	191	10	70	1,436	10	none	39
Webster	555	25	11	1,595	none	none	73
West Baton Rouge	62	none	none	344	none	none	20
West Carroll	115	2	1	1,430	3	1	103
West Feliciana	25	none	none	211	5	none	17
Winn	422	18	14	1,263	1	none	73
Orleans	5,889	50	249	6,342	177	52	339
Total	29,492	3,288	3,332	93,334	1,094	181	9,842

OYSTERS AND DYNAMITE

(From Times Picayune)

Dynamite charges up to 400 pounds, such as might be used in geophysical oil exploration tests in open waters of the Gulf area, have been found to produce astoundingly little effect on the health of oysters even at close range, it is announced by Commissioner Appel of the state wild life and fisheries department. The blasting experiments were conducted several months ago in St. Bernard parish by conservation and oil experts, and have been checked with the aid of the federal fisheries research station at Pensacola. The checks consisted of close comparative studies of oysters drawn from the beds before the explosions and oysters remaining in the beds after exposure to the shocks.

This experiment winds up, with minor exceptions, the actual testing of the damage done by heavy seismogaphic operations to marine life. Previously it was announced that shrimp and fish had been found unaffected by 800-pound blasts outside a 200-foot radius. Controls used were of the same elaborate nature as those characterizing the oyster bed experiments. It is not claimed of course, that fish will not be injured on the actual scene of the explosion. The areas tested for geophysical purposes by any two sets of dynamitings are much greater, however, than the area of potential injury to marine life, according to these findings. Their importance lies in the fact that oil explorations can be expedited without serious detriment to fisheries interests.

The damage done shrimp and fish by the old 50-pound charges has always proved surprisingly low, according to the state authorities. No dynamitings at all have been permitted, however near or above oyster beds. The oyster in some respects is an unpredictably sensitive creature, and the results of the experiments probably were awaited with some trepidation. From the standpoint of immunity to "shell shock," however the oyster would seem to be tougher than other denizens of the open waters.

Sale of 3,250,000 board feet of stumpage, more than 75 percent of it pine, from the Kisatchie National Forest in west central Louisiana to the L. D. Kellogg Lumber Company of Alexandria, Louisiana, has been announced by Regional Forester Joseph C. Kircher.

The stumpage price ranged from $13.25 per thousand for the pine down to $1 per thousand for post oak, for a total of $36,235. Added to the sale price is $3,250 for sale area betterment work in the remaining stands.

One quarter of the gross sales receipts, or about $9,058, is earmarked for return, in lieu of taxes, to the parishes in which the Kisatchie Forest lies.

VALUE AND "TAKE" OF FRESH AND SALT WATER FISHERIES OF LOUISIANA

Fresh Water Fish:	1943 Production	Value	1944 Production	Value
Catfish	3,068,136 lbs.	$ 690,330.60	3,973,753 lbs.	$ 1,092,782.08
Gaspergou	1,207,989	180,400.85	1,324,681	231,819.18
Spoonbill	105,552	15,832.80	88,889	17,777.80
Buffalo	2,597,157	389,573.55	3,564,503	891,125.75
Fresh Water Turtles	98,155	12,269.38	59,620	11,924.00
Frogs	253,390	105,580.00	788,998	361,245.00
Fresh Water Shrimp	45,944	11,486.00	224,818	78,686.30
Crayfish	189,061	28,359.15	934,686	327,140.10
Miscellaneous	984,018	98,401.80	490,332	98,066.40
	8,549,402 lbs.		11,450,280 lbs.	
"Baby" Green Turtles	1,164,937 Trtls.	58,246.85	1,501,789 Trtls.	30,035.80
Terrapins	932 doz.	18,960.00	21,021 doz	420,420.00
		$ 1,609,440.98		$ 3,561,022.41

Miscellaneous: includes Gars, German Carps, Drums, etc.

Salt Water Fisheries:	1943 Production	Value	1944 Production	Value
Speckled Sea Trout	294,865 lbs.	$ 78,459.50	304,629 lbs.	$ 137,083.05
Red Fish	320,457	88,125.67	200,290	100,145.00
Sheepshead	46,255	9,251.00	53,281	18,648.35
Flounders	55,588	13,897.00	92,613	41,675.85
Snappers	336,488	117,770.80	273,284	95,649.40
Salt Water Catfish	44,258	4,425.80	76,250	19,062.50
Common Salt Water Fish	1,299,409	129,940.90	601,331	150,332.75
Salt Water Turtles	27,204	3,400.50	48,418	12,104.50
Crabmeat	589,382	294,691.00	2,029,892	1,014,946.00
	3,013,906 lbs.		2,679,988 lbs.	
Hard Shell Crabs	375,341 doz.	133,550.00	1,541,760 doz.	770,880.00
Soft Shell Crabs	30,331 doz.	90,993.00	48,255 doz.	120,637.50
		$ 964,505.17		$ 2,481,164.90

The above values are at the fishing grounds, i.e., prices paid to the commercial fishermen, which value becomes augmented as the product is passed on to dealers, retailers and finally to the consumers.

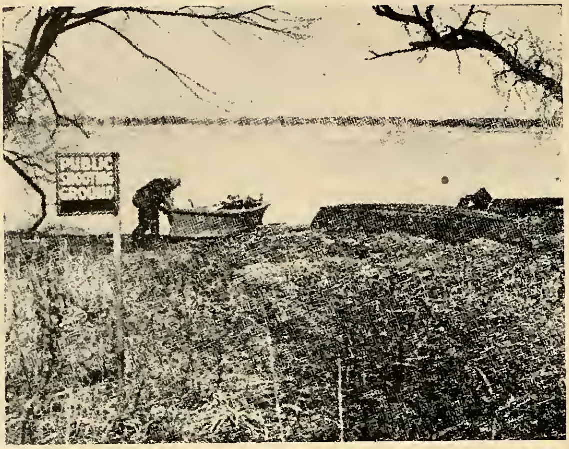
SHRIMP

	Amount	Estimated Value
1943		
Salt Water Shrimp	415,909 Barrels	$ 7,486,362.00
1944		
Salt Water Shrimp	506,467 Barrels	$ 9,116,226.00

The OPA ceiling price on shrimp ranges from $10.00 to $35.00 per barrel, based on size of the shrimp. The value of the shrimp shown above is arrived at an average price of $18.00 per barrel.

The Department of Wild Life and Fisheries sells approximately 2,600 trawlers and freighters licenses. Figuring an average of 4 men crew to each trawler and/or freighter, there are approximately 104,000 people actually employed in the work of catching the shrimp.

Add to this, the number of people engaged on drying platforms, processing plants, canning plants, trucking, picking shrimp, etc., a conservative estimate of 125,000, makes a total of approximately 229,000 in Louisiana employed in the shrimp industry.



A service man's poll recently taken indicates that returning soldiers want more places to camp, more public shooting grounds, and more fishing opportunities.

Service Man Poll Indicates Forty Per Cent Converted to Outdoor Interests By War

An Architect named Uncle Sam has built an outdoor living room into the postwar design for living of nearly 40 per cent of the 1,503 service men from 37 states recently interviewed by the New York State Conservation Department. Such was disclosed by the tabulation of statistics obtained by the Department's Bureau of Conservation Education at the National Sportsmen's Show in New York City. The service men were interviewed in an attempt to determine how much added pressure can be expected on the state's outdoors resources after the war by men who, prior to training in the use of arms and camp equipment, never had handled a rifle, shotgun or a tent stake.

"The interviews show," said Commissioner Skiff, "that our postwar conservation plans are on the right track. The boys in general plan to spend more time outdoors. The majority want to hunt pheasants and deer, fish for trout and have plenty of places to camp.

"The Army says," he added, "that less than three per cent ever handled sporting arms before the war. That one was hard for us to take; but we believe it now. Furthermore, they're so anxious to try their new skills that a surprisingly large number of those interviewed said they thought Uncle Sam either should give 'em first crack at the government's huge stock of outdoors equipment when it's available for sale or retain special reserve supplies for service men. A lot of the boys are just plain worried that, by the time they get out, the cream of the equipment already will be in civilian hands."

Most controversial of the issues mentioned by the service men was that concerning the use of the government's automatic rifles for deer hunting. A total of 62 men raised the question and almost exactly half expressed the belief that, regardless of whether these rifles were suitable for deer, they should be banned anyway because of "potential danger in unskilled hands."

Sectional preference of the service men were at variance. The boys from California and some of the other far western states seem to agree that more funds for fish and game restoration was the postwar need. Those from the central states seem to want more places to camp, more public shooting grounds, especially for pheasants and ducks, and more trout fishing. The Michigan, Wisconsin and Minnesota group apparently desire more development of agricultural lands for public hunting. The south-central group was surprisingly interested in garfish control and in more bass fishing. The northeasterners will use the big woods more for camping and canoeing, will do more deer hunting and want more pheasants. Heavier trout-stocking and reservation of more streams for fly fishing were equally popular requests. The boys from the middle Atlantic states want more public hunting grounds and waterfowl areas, more trout and more places to camp, while those from the southeastern region want turkeys.

A surprisingly large number, having seen European land management practices for soil, forests and even fish in operation, expressed the desire that more states launch active programs of soil conservation. This same group generally thanked their lucky stars that America was still a land of free recreational opportunities outdoors. They urged states to adopt wider programs of land and water acquisition to assure the public of extensive areas to hunt, fish and camp for all time.

Maryland Rally Sheet.

Oyster-Dynamite Seismographic Results Reported

(Continued from Page 5)

or possibly other substances from the mud in the oyster bed might be a factor. Therefore, subsequent examinations were made directly on the experimental sites to determine if any significant death rate occurred among the oysters left on the reef after the blast.

The results of these exhaustive experiments may be very briefly summarized.

The explosion of charges of up to 400 pounds, where the top sticks of dynamite were only 25 feet below the oyster bed, failed to cause mortality in that oyster bed. There can be no doubt whatever about the validity of these conclusions since as has already been indicated most careful observations were made of oysters removed at the time of the explosions and also of oysters remaining in the area.

The interpretation of the actual progress and dissipation of the shock waves must be made at a later date but it should suffice here to say that all of these experiments fall very well into a complete pattern ranging from the use of depth charges, the effects of heavy artillery fire, the effects of heavy bombing, and the most recent of all explosives, the effects of atomic bombing.

It is, therefore, on this basis of careful experimental work that we can now conclude that seismographic exploration of oil can be carried out adequately without harming our valuable aquatic resources. This is not a matter of surmise and not a matter of wishful thinking, but is a matter of carefully planned experiments adequately controlled and providing these revealing valuable results.

Lake Bistineau Waters Lowered

(Continued from Page 1)

expose as much of the flooded lands to the sunlight and air as possible.

This exposure to the air accomplishes many purposes. It helps destroy many water plants that if not controlled would destroy all fish life in these waters, the most destructive of these plants in these lakes now is the American Lotus known locally on Bistineau and Black Lakes as Chinkapin, Yonkapin and Ninock. All water hyacinth that are caught in the trees and bushes are also destroyed which will help to keep the water hyacinth down until such time as this plant can be completely eradicated. It will also reduce the density of many of the water grasses that become so thick that fishing is impossible and that choke out the growth of the more desirable water plants.

Department officials also point out that previous to the building of the dam on Lake Bistineau by the State several years ago, Bistineau used to go dry nearly every year during the months of July, August and sometimes into September and only on exceptionally wet summers would the lake fail to go dry each year. So, all the years that Bistineau furnished such splendid fishing and hunting, nature itself took care of the draw down that the Department is now proposing.

GOVERNMENT ASKED TO PAY DAMAGES ON FLOODED OYSTER BEDS

Representative Colmer of Mississippi has introduced a bill in Congress asking for an appropriation of $3,000,000 to enable the Secretary of War to make suitable provisions for rehabilitating and replanting the oyster beds which were destroyed or damaged as a result of the opening of the Bonnet Carre Spillway into Lake Pontchartrain from which fresh water flowed over the oyster beds.

The Bill known as H. R. 388 was introduced by Representative Colmer in the House of Representatives on July 21st, shortly before the House recessed, and the measure has been referred to the House Committee on Flood Control.

The Bill provides for reparations for such destruction and damage to oyster beds to be made to the States of Louisiana and Mississippi and to other growers and private owners whose oyster beds were destroyed as a result of the opening of the Spillway.